

## CLAIM AMENDMENTS

1.-40. (Cancelled)

41. (Currently Amended) A method to provide memory upgrade information comprising:  
obtaining memory configuration information of a computer system;  
determining a memory capacity of the computer system, including executing a software routine to determine a maximum number of memory devices ~~than~~ that can be supported per memory bus channel of the computer system; and  
automatically determining memory upgrade options based on the determined memory capacity of the computer system.

42. (Previously Presented) The method of claim 41, wherein the act of obtaining memory configuration information comprises obtaining an indication of an installed system memory amount.

43. (Previously Presented) The method of claim 42, wherein the memory configuration information further comprises a number of memory module sockets.

44. (Previously Presented) The method of claim 42, wherein the memory configuration information further comprises an operating speed of the installed system memory.

45. (Previously Presented) The method of claim 41, wherein the act of obtaining memory configuration information comprises accessing a non-volatile storage device.

46. (Previously Presented) The method of claim 45, wherein the act of accessing a non-volatile storage device comprises accessing a serial presence detect device.

47. (Previously Presented) The method of claim 41, wherein the act of obtaining memory configuration information comprises obtaining information from one or more dynamic random access memory devices.

48. (Previously Presented) The method of claim 41, wherein the act of determining a memory capacity comprises obtaining an indication of a maximum number of memory devices for the computer system.

49. (Previously Presented) The method of claim 41, wherein the act of determining a memory capacity comprises obtaining an indication of a maximum amount of memory for the computer system.

50. (Previously Presented) The method of claim 41, wherein the act of determining a memory capacity comprises obtaining an indication of a maximum number of memory module sockets for the computer system.

51. (Previously Presented) The method of claim 41, further comprising providing memory upgrade options to a user.

52. (Cancelled)

53. (Previously Presented) The method of claim 41, wherein the characteristic comprises a limit on the number of memory devices that can be used with a memory controller.

54. (Currently Amended) A program storage device, readable by a programmable control device, comprising instructions for causing the programmable control device to:

- obtain memory configuration information of a computer system;
- determine a memory capacity for the computer system, including determining whether a maximum number of device sockets that can be supported by a memory controller of the computer system; and
- determine memory upgrade options based on the determined memory capacity of the computer system.

55. (Previously Presented) The program storage device of claim 54, wherein the instructions to obtain memory configuration information comprise instructions to obtain an indication of an installed system memory amount.

56. (Previously Presented) The program storage device of claim 55, wherein the memory configuration information further comprises a number of memory module sockets.

57. (Previously Presented) The program storage device of claim 54, wherein the instructions to obtain memory configuration information further comprise instructions to obtain an indication of a number of memory module slots available to the programmable control device.

58. (Previously Presented) The program storage device of claim 54, wherein the instructions to obtain memory configuration information comprises instructions to access a non-volatile storage device.

59. (Previously Presented) The program storage device of claim 54, wherein instructions to determine a memory capacity comprise instructions to obtain an indication of a maximum number of memory devices for the computer system.

60. (Previously Presented) The program storage device of claim 54, wherein the characteristic comprises a limit on the number of memory devices that can be installed on a memory channel regardless of the number of open memory slots.

61. (Cancelled)

62. (Currently Amended) A computer system comprising:  
a processor;  
system memory coupled to the processor, the system memory having one or more memory modules and a memory configuration, wherein the memory modules include one or more memory devices; and  
a configuration routine including instructions to obtain memory configuration information, determine a memory capacity of the computer system, including determining a maximum number of memory devices ~~than~~ that can be supported per memory bus channel of the computer system of the computer system and determine memory upgrade options based on the determined memory capacity.

63. (Previously Presented) The computer system of claim 62, wherein the instructions to obtain memory configuration information comprise instructions to obtain indications of installed memory devices.

64. (Previously Presented) The computer system of claim 62, wherein the instructions to determine a memory capacity comprise instructions to obtain an indication of a maximum amount of memory for the computer system.

65. (Previously Presented) The computer system device of claim 62, wherein the instructions to obtain memory configuration information comprise instructions to obtain an indication of an installed system memory amount.

66. (Cancelled)

67. (Previously Presented) The computer system of claim 62, wherein the characteristic comprises a limit on the number of memory devices that can be installed on a memory channel regardless of the number of open memory slots.

68. (Cancelled)